

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An information-transmitting method for transmitting program guide information, said method comprising the steps of:

processing a plurality of commercial information which corresponds to said program guide information and which is automatically displayed for a single program column or a plurality of program columns on a program guide screen in a receiver and is transmitted together with said program guide information;

wherein, when a cursor is moved onto a program of a program column of the program guide screen, each of said commercial information ~~of the~~ provided by a commercial information sponsor of the program displayed at each program column is displayed successively, shifted temporally from one another; and

selectively picking program content data from a plurality of program content regions and combining the selectively picked program content data from said plurality of program content regions with transmitted screen layout data and previously stored standard screen layout data to create said program guide screen;

wherein said program content data includes at least three types of data that include modifiable data, fixed data and comparatively large-sized data; and

wherein said selectively picked program content data are categorized in at least two types of data with different structures and formats, and

wherein the commercial information includes a remote network server address information.

2. (Original) The information transmitting method according to claim 1, wherein said commercial information includes at least image data.

3. (Original) The information transmitting method according to claim 2, wherein said commercial information further includes sound data.

4. (Original) The information transmitting method according to claim 1, wherein said commercial information further includes address information of a computer which provides the detailed information of said commercial.

5. (Previously Presented) The information transmitting method according to claim 1, wherein said program guide information is composed of a plurality of hierarchical levels in accordance with the data size, the first hierarchical level having a small amount of data includes identification information for identifying said commercial information and the second hierarchical level having a large amount of data including identification information for identifying said commercial information and the actual commercial information.

6. (Currently Amended) A receiving apparatus for receiving a signal including commercial information and electronic program guide information, said receiving apparatus comprising:

processor for displaying a plurality of commercial information in a part of a display area and an electronic program guide screen including program columns corresponding to a plurality of programs based on the received electronic program guide information;

wherein, when a cursor is moved onto a program of a program column of said program guide screen, said processor performs display processing to automatically and successively display, being shifted temporally from one another, for a single program column or a plurality of program columns a plurality of commercial information ~~of the~~ provided by a commercial information sponsor of the program displayed at each program column in said part of the display area on said electronic program guide screen; and

program guide processing section for selectively picking program content data from a plurality of program content regions and combining the selectively picked program content data from said plurality of program content regions with transmitted screen layout data and previously stored standard screen layout data to create said program guide screen;

wherein said program content data includes at least three types of data that include modifiable data, fixed data and comparatively large-sized data; and

wherein said selectively picked program content data are categorized in at least two types of data with different structures and formats,

wherein the processor displays a remote network server address of the commercial information sponsor and enables a user to select the remote network server address and, in response to said selection, display detailed information of the commercial information.

7. (Previously Presented) The receiving apparatus according to claim 6, comprising:

specifying section for specifying a commercial information displayed on a part of said program guide screen; and

communication section for communicating with an external computer through a computer network, wherein said processor picks up the detailed information of said commercial information from the external computer through said communication section to display the picked up detailed information, based on the address information included in said commercial information, when said commercial information is specified by said specifying section.

8. (Previously Presented) The receiving apparatus according to claim 6, wherein

said processor, when one program column is selected on said electronic program guide screen, performs display processing to display a program details screen showing in detail the program corresponding to the program column selected and to sequentially display plural items of commercial information included in the program in a part of the display area on said program details screen.

9. (Previously Presented) The receiving apparatus according to claim 8, wherein said processor, when commercial information being displayed in said part of the display area on said program details screen is designated, performs display processing to display a commercial details screen showing in detail said designated commercial information.

10. (Previously Presented) The receiving apparatus according to claim 6, wherein said processor, when commercial information being displayed in said part of the display

area on said electronic program guide screen is designated, performs display processing to display a commercial details screen showing in detail said commercial information designated.

11. (Previously Presented) The receiving apparatus according to claim 6, wherein said commercial information is commercial information of sponsors for providing said programs.

12. - 13. (Canceled)

14. (Previously Presented) The receiving apparatus according to claim 6, wherein said commercial information includes at least image data.

15. (Previously Presented) The receiving apparatus according to claim 14, wherein said commercial information further includes audio data.

16. (Currently Amended) A receiving method, comprising the steps of:
receiving a signal including a plurality of commercial information and electronic program guide information;

displaying commercial information in a part of a display area and an electronic program guide screen having program columns corresponding to a plurality of programs on the basis of the received electronic program guide information;

moving a cursor onto one program column on said electronic program guide screen being displayed;

automatically and successively displaying, shifted temporally from one another, for a program of a single program column or a plurality of program columns a plurality of said commercial information ~~of the~~ provided by a commercial information sponsor of the program displayed at each program column included in the one program onto which the cursor has been moved, in said part of the display area on said electronic program guide screen;

displaying a remote network server address of a commercial information sponsor of the program;

enabling a user to select the remote network server address;

displaying, in response to said selection, detailed information of the commercial information; and

selectively picking program content data from a plurality of program content regions and combining the selectively picked program content data from said plurality of program content regions with transmitted screen layout data and previously stored standard screen layout data to create said program guide screen;

wherein said program content data includes at least three types of data that include modifiable data, fixed data and comparatively large-sized data; and

wherein said selectively picked program content data are categorized in at least two types of data with different structures and formats.

17. (Previously Presented) The receiving method according to claim 16, wherein when one program column is selected on said electronic program guide screen, a program details screen showing in detail the program corresponding to the program column

selected, and plural items of commercial information included in the program are sequentially displayed in a part of the display area on said program details screen.

18. (Previously Presented) The receiving method according to claim 17, wherein when commercial information being displayed in said part of the display area on said program details screen is designated, a commercial details screen showing in detail the designated commercial information is displayed.

19. (Previously Presented) The receiving method according to claim 16, wherein when commercial information being displayed in said part of the display area on said electronic program guide screen is designated, a commercial details screen showing in detail the designated commercial information is displayed.

20. (Previously Presented) The receiving method according to claim 16, wherein said commercial information is commercial information of sponsors for providing said programs.

21. (Previously Presented) The receiving method according to claim 16, wherein said commercial information includes address information of a computer on a computer network for providing detailed information of said commercials.

22. (Currently Amended) A transmitting-receiving system, comprising:

a transmitting apparatus for transmitting a signal including a plurality of commercial information and electronic program guide information; and

a receiving apparatus for receiving said signal, said receiving apparatus:

displaying commercial information in a part of a display area and an electronic program guide screen having program columns corresponding to a plurality of programs on the basis of the electronic program guide information;

moving a cursor onto one program column on said electronic program guide screen being displayed;

automatically and successively displaying, shifted temporally from one another, for a program of a single program column or a plurality of program columns a plurality of said commercial information of the provided by a commercial information sponsor of the program displayed at each program column included in the one program onto which the cursor has been moved, in said part of the display area on said electronic program guide screen;

displaying a remote network server address of a commercial information sponsor of the program;

enabling a user to select the remote network server address;

displaying, in response to said selection, detailed information of the commercial information; and

selectively picking program content data from a plurality of program content regions and combining the selectively picked program content data from said plurality of program content regions with transmitted screen layout data and previously stored standard screen layout data to create said program guide screen;

wherein said program content data includes at least three types of data that include modifiable data, fixed data and comparatively large-sized data; and

wherein said selectively picked program content data are categorized in at least two types of data with different structures and formats.

23. (Previously Presented) The system according to claim 22, wherein said commercial information is commercial information of sponsors for providing said programs.

24. (Previously Presented) The system according to claim 22, wherein said commercial information includes address information of a computer on a computer network which provides detailed information of said commercials.

25. (Previously Presented) The system according to claim 22, wherein said commercial information includes at least image data.

26. (Previously Presented) The system according to claim 25, wherein said commercial information further includes audio data.

27. (Previously Presented) The information transmitting method according to claim 1, wherein when a cursor is moved onto one program column on said electronic program guide screen, display processing is performed to automatically display for a single program column or a plurality of program columns in sequence a plurality of commercial information

included in one program onto which the cursor has been moved in said part of the display area on said electronic program guide screen.

28. (Previously Presented) The receiving apparatus according to claim 6, wherein when a cursor is moved onto one program column on said electronic program guide screen, said processor performs display processing to sequentially display a plurality of commercial information included in one program onto which the cursor has been moved in said part of the display area on said electronic program guide screen.

29. (Previously Presented) The receiving method according to claim 16, wherein when a cursor is moved onto one program column on said electronic program guide screen, display processing is performed to sequentially display a plurality of commercial information included in one program onto which the cursor has been moved in said part of the display area on said electronic program guide screen.

30. (Previously Presented) The system according to claim 22, wherein when a cursor is moved onto one program column on said electronic program guide screen, display processing is performed to sequentially display a plurality of commercial information included in one program onto which the cursor has been moved in said part of the display area on said electronic program guide screen.

31. (Currently Amended) An information-transmitting method for transmitting program guide information, the method comprising the steps of:

processing a plurality of commercial information that corresponds to the program guide information and that is automatically displayed for a single program column or a plurality of program columns on a program guide screen in a receiver and is transmitted together with the program guide information;

wherein, when a cursor is moved onto a program of a program column of the program guide screen, ~~each of the commercial information of the~~ provided by a commercial information sponsor of the program displayed at each program column is displayed successively, shifted temporally from one another; and

wherein the commercial information includes a remote network server address information.

32. (Currently Amended) A receiving apparatus for receiving a signal including a plurality of commercial information and electronic program guide information, the receiving apparatus comprising:

processor for displaying the plurality of commercial information in a part of a display area and an electronic program guide screen including program columns corresponding to a plurality of programs based on the received electronic program guide information;

wherein, when a cursor is moved onto a program of a program column of the program guide screen, the processor performs display processing to automatically and successively display, shifted temporally from one another, for a single program column or a plurality of program columns the plurality of commercial information ~~of the~~ provided by a commercial information sponsor of the program displayed at each program column in the part of the display area on the electronic program guide screen,

wherein the processor displays a remote network server address of the commercial information sponsor of the program and enables a user to select the remote network server address and, in response to said selection, display detailed information of the commercial information.

33. (Currently Amended) A receiving method, comprising the steps of:
receiving a signal including a plurality of commercial information and electronic program guide information;

displaying the plurality of commercial information in a part of a display area and an electronic program guide screen having program columns corresponding to a plurality of programs on the basis of the received electronic program guide information;

moving a cursor onto one program column on the electronic program guide screen being displayed;

automatically and successively displaying, shifted temporally from one another, for a program of a single program column or a plurality of program columns a plurality of the commercial information of the provided by a commercial information sponsor of the program displayed at each program column included in the one program onto which the cursor has been moved, in the part of the display area on the electronic program guide screen; ~~and~~

displaying a remote network server address of a commercial information sponsor of the program;

enabling a user to select the remote network server address; and

displaying, in response to said selection, detailed information of the commercial information.

34. (Currently Amended) A transmitting-receiving system, comprising:
a transmitting apparatus for transmitting a signal including a plurality of commercial information and electronic program guide information; and
a receiving apparatus for receiving the signal, the receiving apparatus:
a display apparatus to display commercial information in a part of a display area and an electronic program guide screen having program columns corresponding to a plurality of programs on the basis of the received electronic program guide information; and
wherein the transmitting-receiving apparatus automatically and successively displays, shifted temporally from one another, for a program of a single program column or a plurality of program columns a plurality of ~~the commercial information of the~~ provided by a commercial information sponsor of the program displayed at each program column included in the one program onto which a cursor has been moved, in the part of the display area on the electronic program guide screen, and
wherein the receiving apparatus causes the display apparatus to display a remote network server address of the commercial information sponsor of the program and enables a user to select the remote network server address and, in response to said selection, display detailed information of the commercial information.

35. (Currently Amended) A method of displaying commercial data on an electronic program guide, comprising:
receiving the electronic program guide information and a plurality of commercial information;

displaying on a display the electronic program guide information having program columns corresponding to a plurality of programs;

in response to moving a cursor onto a program of a program column, shifted temporally from one another, automatically and successively displaying a plurality of ~~the~~ commercial information in a part of the display of the electronic program guide; and

displaying a remote network server address of a commercial information sponsor of the program;

enabling a user to select the remote network server address;

displaying, in response to said selection, detailed information of the commercial information,

wherein each of the plurality of commercial information is ~~of the~~ provided by a commercial information sponsor of the program displayed at each program column.

36. (Withdrawn) A transmitter for an electronic program guide (EPG) comprising:

an output management data producer to provide management information for a plurality of programs in the EPG including program broadcast time;

a main controller to receive the management information and provide a timing control signal representing the time of outputting of each respective program to synchronize transmission of EPG data;

an EPG editor to receive the management information and commercial information and to provide EPG data;

an audio/video data producer to provide A/V program data that includes the commercial information;

two or more encoders to encode the A/V program data and synchronize the encoded A/V program data with the timing control signal;

an EPG sub-controller to receive and synchronize the EPG data with the timing control signal;

and

a multiplexer to combine the encoded and synchronized A/V program data and the synchronized EPG data and produce an EPG transmission signal for transmission.

wherein the EPG data has program content data on the programs of each broadcasting channel during a predetermined time interval that hierarchically includes (1) broadcasting form data for regular program, for rebroadcasting programs, for broadcasting programs at a key station, or for broadcasting at a local station; (2) group data that is common in a plurality of programs of the broadcasting form data arranged as a single program; and (3) detailed contents data including respective programs of the broadcast form data and the particular information group data.

37. (Previously Presented) The transmitting-receiving system of claim 34, wherein the transmitting apparatus further comprises:

an output management data producer to provide management information for a plurality of programs in the EPG including program broadcast time;

an EPG editor to receive the management information and commercial information and to provide EPG data;

a multiplexer to combine encoded audio/visual program data synchronized with the EPG data and produce an EPG transmission signal for transmission.

wherein the EPG data has program content data on the programs of each broadcasting channel during a predetermined time interval that hierarchically includes (1) broadcasting form data for regular program, for rebroadcasting programs, for broadcasting programs at a key station, or for broadcasting at a local station; (2) group data that is common in a plurality of programs of the broadcasting form data arranged as a single program; and (3) detailed contents data including respective programs of the broadcast form data and the particular information group data.